

A NEW COMBINATION IN *ERAGROSTIS* (POACEAE: ERAGROSTIDEAE)

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ABSTRACT

The new combination *Eragrostis pectinacea* var. *tracyi* is proposed as a more appropriate means of recognizing the slight morphological difference of possessing longer anthers. A revised key to the three varieties of *E. pectinacea*, a diagnosis of var. *tracyi*, and specimens examined are provided.

RESUMEN

Se propone la nueva combinación *Eragrostis pectinacea* var. *tracyi* como más apropiada para reconocer las ligeras diferencias morfológicas de tener anteras más largas. Se ofrece una clave revisada de las tres variedades de *E. pectinacea*, una diagnosis de la var. *tracyi*, y los especímenes examinados.

The genus *Eragrostis* consists of approximately 350 species worldwide and, of these, about 120 species are represented in the western hemisphere (Peterson et al., in press). The present biogeographical pattern supports the hypothesis that the genus arose in the Old World, probably in southern Africa where it is most speciose. The best combination of characters used to discriminate *Eragrostis* from other Eragrostideae is: disarticulation of the lemma and palea occurring separately; longitudinally bowed-out paleas with ciliolate keels; and 3-nerved, unawned lemmas. Within *Eragrostis* the species limits are often overlapping. Few agrostologists have attempted to work out a suitable phylogenetic scheme. Based on 442 morphological and anatomical characters, and using a worldwide sample of 53 species, Van den Borre and Watson (1994) recognized two subgenera, *Eragrostis* and *Caesia*. The new combination appears to reside in the former.

While preparing the *Eragrostis* treatment for the new *Manual of North American Grasses*, Edited by M. Barkworth, (Peterson & Harvey, in press) I became aware of the similarities between *E. tracyi* Hitchc. and the common purple lovegrass [*E. pectinacea* (Michx.) Nees]. The following paper provides a rationale for the new combination of *E. pectinacea* var. *tracyi* (Hitchc.) P.M. Peterson.

Hitchcock (1934) first described *E. tracyi* from specimens collected by S.

M. Tracy on Sanibel Island. In his paper he wrote, "apparently perennial" and in his Latin description he indicated "Perennis (?)." Koch (1972) re-evaluated *E. tracyi* and found it to be an annual with a hexaploid chromosome number of $n = 30$, $x = 10$. Koch (1972, 1978) concluded that *E. tracyi* was closely related to *E. lutescens* Scribn., *E. pectinacea*, and *E. tephrosanthos* Schult. Koch (1972) found that *E. tracyi* could be distinguished from these other species by its larger anthers. *Eragrostis pectinacea* and *E. tephrosanthos* have previously been determined to be hexaploids at $n = 30$, $x = 10$ (Koch 1974). More recently, Reeder (1986) recognized two varieties in *E. pectinacea*, var. *pectinacea* and var. *miserrima* (E. Fourn.) Reeder. The latter variety includes *E. tephrosanthos* as a synonym. I agree with Reeder's treatment of placing *E. tephrosanthos* as a synonym of *E. pectinacea*. *Eragrostis pectinacea* is a highly variable taxon as described by Koch (1974). Anther length is the only morphological characteristic that can be used to differentiate *E. tracyi* from *E. pectinacea* (0.5–0.7 mm long in the former and 0.2–0.4 mm long in the latter). To remain consistent with the new broader delimitation of *E. pectinacea* and since a single morphological trait separates these two taxa, I feel that *E. tracyi* should be reduced to the varital rank of *E. pectinacea*. A key to the three varieties of *E. pectinacea*, a diagnosis of var. *tracyi*, and specimens examined in the U.S. Herbarium are given below.

KEY TO THE VARIETIES OF *ERAGROSTIS PECTINACEA*

1. Anthers 0.5–0.7 mm long var. *tracyi*
2. Anthers 0.2–0.4 mm long.
 2. Pedicels appressed or rarely diverging up to 20° from the branches var. *pectinacea*
 2. Pedicels widely spreading var. *miserrima*

***Eragrostis pectinacea* (Michx.) Nees var. *tracyi* (Hitchc.) P.M. Peterson, comb. nov. *Eragrostis tracyi* Hitchc., Amer. J. Bot. 21:130. 1934. TYPE: U.S.A. FLORIDA. Lee Co.: Sanibel Island, 19 May 1901, Tracy 7168 (HOLOTYPE: US!; ISOTYPE: US!).**

Panicles with spreading branches 20–80° from the culm axis. Anthers 0.5–0.7 mm long.

Ecology and Distribution.—Sandy soils, along shell beaches, and roadsides; associated with *Eragrostis ciliaris* (L.) R. Br., *Agave*, *Juniperus*, *Sabal*, and *Yucca*; 0–30 m elevation; Lee, Manatee, Pinellas, and Sarasota cos., Florida; flowering March through May and August through December.

Common Name.—Sanibel lovegrass.

Representative specimens (all at US). U.S.A. Florida. Lee Co.: Sanibel Island, Jul-Aug 1900, Hitchcock s.n.; 28 Dec 1953, Cooley 2495; 13 Apr 1954, Cooley 2608; 11 Mar 1971, Koch 7123; Western Sanibel, Brumbach 7721, 3 Nov 1971; Eastern Sanibel, Brumbach 7767, 13 Dec 1971. Mantee Co.: Anna Maria Key, 24 Sep 1968, Harvey 8174; Longboat Key, 27 Apr 1900, Tracy 6709; 24 Sep 1968, Harvey 8177; 9 Mar 1971, Koch 7113; 23 Aug 1971,

Godfrey 70891. Sarasota Co.: Longboat Key, 6 Oct 1964, *Lakela* 27566; 21 Nov 1964, *Godfrey* 65243; Venice City, 10 Mar 1971, *Koch* 7116.

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